infectious agent, and further wherein the variable regions of the α and β polypeptide chains of said T cell receptor are replaced by said variable regions of the antibody.

39. (New) The transfected T-cell of claim 38, wherein the antibody is an antibody that binds carcinoembryonic antigen (CEA).

40. (New) The transfected T-cell of claim 38, wherein the antibody is a humanized antibody that binds carcinoembryonic antigen (CEA).

41. (New) A composition comprising the transfected T cell of claim 38 and a cytokine.

42. (New) The composition of claim 41, wherein the cytokine is interleukin-2.

43. (New) A transfected T cell comprising a DNA molecule encoding a chimeric immunoglobulin/T cell receptor or a chimeric immunoglobulin/CD3 protein, wherein said immunoglobulin-encoding portion of said DNA molecule encodes the variable region of an anti-idiotypic antibody that recognizes an antibody that binds a tumor-associated antigen (TAA) or an antigen associated with an infectious agent, and further wherein the variable regions of the α and β polypeptide chains of said T cell receptor are replaced by said variable regions of the anti-idiotypic antibody.

B3 cont.

44. (New) The transfected T-cell of claim 43, wherein the antibody is an antibody that binds carcinoembryonic antigen (CEA).

45. (New) The transfected T-cell of claim 43, wherein the antibody is a humanized antibody that binds carcinoembryonic antigen (CEA).

46. (new) A composition comprising the transfected T cell of claim 43 and a cytokine.

47. (new) The composition of claim 46, wherein the cytokine is interleukin-2.